

SHEEP HEALTH MANAGEMENT IN KOSOVO

KOSOVO CLUSTER AND BUSINESS SUPPORT PROJECT



05 January 2006

This publication was produced for review by the United States Agency for International Development. It was prepared by the KCBS project team of Chemonics International Inc. based on a Final Report prepared by Short Term Technical Advisor, Adem Rana.

SHEEP HEALTH MANAGEMENT IN KOSOVO

THE REPORT DESCRIBES ASSISTANCE GIVEN TO THE SHEEP FARMERS THROUGH TRAINING COURSES AND DISTRIBUTION OF INFORMATION RELATED TO HEALTH ISSUES OF SHEEP FLOCKS.

Kosovo Cluster and Business Support project "Sheep Health Management in Kosovo" Contract No. AFP-I-00-03-00030-00, TO #800

This report submitted by Chemonics International Inc. / 06 January 2006

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

CONTENTS

PURPOSE OF ASSIGNMENT	1
BACKGROUND:	1
EXECUTIVE SUMMARY	2
FIELD ACTIVITIES TO ACHIEVE PURPOSES	3
TASK FINDINGS AND RECOMMENDATIONS	3
CONCLUSIONS AND RECOMMENDATIONS FOR	
FUTURE ACTIVITY	6

PURPOSE OF ASSIGNMENT

This assignment is designed to provide assistance to the sheep farmers by means of training and information material to gain a better understanding of common diseases in sheep, their identification and treatment. The assignment will also make farmers aware of the nature and potential consequences of important livestock diseases and of the benefits to be derived from their prevention and eradication.

BACKGROUND:

From 1989 onwards, the agriculture sector fell into decline. For the majority of the rural population living on small to very small farms of frequently less than 1-hectare land, agriculture crop and livestock production is the main source for moderate family income and/or subsistence. The livestock sub-sector is characterized by small-scale dairy, beef, sheep, egg and broiler production. Number of sheep declined from over 600,000 in the past to its estimated size of around 90,000 head.

Aid support immediately after the conflict was largely characterized by a series of donor funded interventions that were aimed at ensuring the supply of key inputs, restocking of the national dairy herd, and also rehabilitation of veterinary services.

EAR is currently financing a programme with the aim to strengthen the Public Veterinary Services in Kosovo: The SPUVESEK project had the objectives of supporting livestock production and trade and veterinary public health by improving animal disease surveillance and control programmes and veterinary border inspection. The goal was to ensure food safety and thus consumer protection, through monitoring and surveillance of food of animal origin, drug and residue surveillance and control of food imports; and to ensure appropriate standards of animal health, husbandry and welfare.

SPUVESEK is organizing the livestock identification and movement control system, thus assisting in animal disease control and food safety.

Before and after the war, there were no trainings nor production of information materials regarding sheep health issues for the farmers in Kosovo. Farmers didn't get appropriate information regarding sheep diseases in form of leaflets, booklets, posters, audio and video materials as means to enhance their knowledge and make them aware about diseases common to sheep and goats. There is an obvious lack of education and awareness concerning sheep health and diseases common to sheep despite efforts made by KVFA on this regards. Farmers need to be informed about the most frequent and important diseases affecting sheep farms in Kosovo and thus to know how to distinguish healthy from diseased animals, how to treat diseases with available medicaments, and how to prevent diseases from occurring.

There is no organized linkage between sheep farmers or farmers associations and certain departments of the KVFA, and no facilitator of better communication between this two parties, although there is mechanism to reach them easily through veterinary stations and also through rural development advisory service –MAFRD.

EXECUTIVE SUMMARY

During postwar period, there were limited serological surveys related to sheep diseases in Kosovo. Therefore as a result of this there is no relevant report, which might give an action frame for future operations regarding detection of problems and concerns related to sheep diseases which are common for Kosovo and Balkan region.

From the KVFA survey made for brucellosis disease in sheep since 2001 to the present, we extracted certain conclusions as regarding the incidence and prevalence of this disease and distribution in Kosovo.

On the basis of the findings, derived from surveys made by KVFA, we selected those municipalities for trainings where incidence and prevalence is considerable in comparison with other municipalities. Initially, knowing that this disease is zoonosis (disease transmissible from animals to humans) and that it represents permanent risk for farmers' health and for farmers' economic well-being, we decided to perform trainings in these targeted regions.

Also, on the basis of findings from KVFA and regional and local veterinarians all around Kosovo we formatted a disease map common to sheep and goats in Kosovo. Important diseases from sheep health point of view can be divided in to two groups: infectious diseases and parasitic diseases.

Most common infectious diseases present in Kosovo are: Brucellosis, Q-fever, Chlamydiosis, Listeriosis, footrot, sore mouth, white muscle disease, enterotoxemia, Mastitis, Parasitic diseases: Fasciolosis(liver fluck), Echinococosis, Canenurosis, oestrosis, ascaridosis, mange, ticks and other. These diseases are diagnosed in the Kosovo Veterinary Laboratories also by clinical examination of animals by field veterinarians.

For sheep farmers in Kosovo, it will be important and essential that the KVFA focuses on diseases whose eradication can have immediate impact on improving production, opening the lamb export market, and to secure mechanisms of disease control; other more difficult animal health problems can be postponed till later. Brucellosis is a problem, and it will be important for many reasons to begin with a national surveillance across the whole of Kosovo, and on the basis of findings to start with a program of disease control and eradication.

EAR is undertaking an identification and registration (I&R) project which will improve traceability of the diseases and helps prevention and eradication programs.

Increased awareness and good surveillance are fundamental to ensure early detection and rapid control of disease. This initiative by USAID-KCBS for performing training for sheep farmers to make them aware and inform them about the newest methods and procedures of identification, treatment and prevention of diseases will improve substantially the mechanism of defense against diseases common to sheep. It will also improve farmers' preparedness to cooperate with authorities in the disease monitoring, disease control and eradication programs.

This is deemed necessary in situation where there is no state or institutional mechanisms for combating and preventing diseases, were there is no efficient border control, animal movement control, disease monitoring program, disease control and eradication programs for diseases dangerous for humans and domestic animals, so sheep farmers are the first line of defense against diseases and therefore make them aware and refresh their knowledge about identification, treatment and prevention of diseases is crucial at this point of time.

I did this work with pleasure and full dedication. I should like to express acknowledgment for the great support given from the KCBS – meat specialist, Gursel Arifi.

FIELD ACTIVITIES TO ACHIEVE PURPOSES

1. Meeting with the farmer Bekim Koxha

Date: December 7, 2005

Location: Kaganik

Subject: Discussion regarding up coming trainings for the sheep farmers and their needs regarding to specific requirements for successful sheep health

management.

Participants: Bekim Koxha, Gursel Arifi

2. <u>Meeting with the farmer Haki Bahtiri, Xhemail Buzuku, Agim Buzuku</u>

Date: December 9, 2005 Location: Lipjan, Hajvali

Subject: Discussion regarding up coming trainings for the sheep farmers and their needs regarding to specific requirements for successful sheep health management.

Participants: Haki Bahtiri, Xhemail Buzuku, Agim Buzuku, Gursel Arifi

3. <u>Meeting with the farmer Krist Bogai</u>

Date: December 16, 2005

Location: Prizren

Subject: Discussion regarding up coming trainings for the sheep farmers and their needs regarding to specific requirements for successful sheep health management.

Participants: Krist Bogaj, Gursel Arifi, Musli Berisha

4. <u>Meeting with representatives of Kosovo Veterinary Institute (KVFA-KVL)</u>

Data: December 19, 2005

Location: Kosovo Veterinary Laboratories

Subject: Discussion regarding laboratory findings of infectious and parasitary diseases common to sheep population and recommendations related to diseases to be dressed in the material and trainings foreseen for farmers.

Participants: Dr. Beqe Hulaj, Dr. Betim Berisha

5. Presentation to sheep farmers in Rahovec

Data: December 20, 2005

Location: Rahovec

Subject: Sheep health management Participants: 17 sheep farmers

6. <u>Presentation to sheep farmers in Prizren</u>

Data: December 21, 2005

Location: Prizren

Subject: Sheep health management Participants: 13 sheep farmers

7. <u>Presentation to sheep farmers in Vitia and Gjilan</u>

Data: December 22, 2005 Location: Viti, Budrike

Subject: Sheep health management Participants: 13 sheep farmers

8. Presentation to sheep farmers in Kaqanik and Ferizaj

Data: December 23, 2005 Location: Ferizaj, Greme

Subject: Sheep health management Participants: 19 sheep farmers

9. <u>Presentation to sheep farmers in Dragash</u>

Data: December 26, 2005 Location: Dragash, Bresan

Subject: Sheep health management Participants: 11 sheep farmers

TASK FINDINGS AND RECOMMENDATIONS

Conclusions can be derived from several trainings held in the different regions of Kosovo (8 municipalities) mainly regions where sheep population is numerous and sheep farming is main activity to generate income for number of families and from the dates collected from different eligible sources.

With pleasure I may conclude that farmers were profoundly interested for sheep health issues and usage of presentation and information material were welcomed and appreciated as a mode for maximizing the knowledge and awareness about disease and preventing them of spread.

During our activities we achieved the following:

- a. Simple description of the nature of the diseases, how they are spread, their potential consequences for the individual farmer and local communities and the importance of their prevention and early detection;
- b. Basic zoosanitary procedures that farmers should routinely adopt. These may include purchase, as far as is practicable, of animals with a known animal health status from areas known to be free of diseases, segregation of newly purchased animals (particularly those acquired from livestock markets) from other animals on the farm or in the village for the first two weeks or so, segregation of any sick animals and elementary hygiene practices;
- c. Identification of the key clinical signs which may alert a farmer to the possible occurrence of particular diseases. These we explained in straightforward, non-technical terms. The "3 Ds" used in rinderpest awareness campaigns are an excellent example. These are discharges, diarrhoea and death; farmers in risk areas are advised that if they see any two of these in their sheep they should assume that there is rinderpest and act accordingly;
- d. Introduction of the new methods of treatment and usage of new medicines and equipment for treatment of sheep.
- e. The importance of close cooperation with veterinarians about creation of shaped vaccination program for herd against the clostridial diseases, sore mouth, foot rot, campylobacteriosis, chlamydiosis, and caseous lymphadenitis.
- f. The importance of action of deworming on a regular schedule and running fecal exams semi-annually to ensure adequacy of the parasite control program through KVFA assistance.
- g. Measures necessary to be taken in the event of outbreak of disease
- h. Increased awareness and good surveillance to ensure early detection and rapid control of disease.
- i. Information on whom to contact and how to contact them if there is an unusual disease occurrence.
- j. Hand out the informative material regarding sheep diseases

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE ACTIVITY

Conclusions:

Completion of project tasks has shown number of deficiencies regarding farmer's knowledge about the health issues of the sheep flocks and here I would like to mention following observations:

- a. Sheep farmers have a limited knowledge about the identification treatment and prevention of diseases common to sheep.
- b. There is no knowledge about mechanism to minimize the risk of introduction of diseases in sheep.
- c. Poor knowledge about necessity and importance of immunization program run jointly by farmers and local veterinarians.
- d. Poor knowledge about importance of adequate and regular feeding with feed which is characteristic for certain phases of age and breed type and certain conditions of animal (e.g. gravidity, breeding).
- e. Importance of the maintenance of safe water supplies, air sanitation, and building with environmental controls.
- f. Lack of cooperation between the farmers and veterinarians in early detection of diseases in an animal population (laboratory tests, examination of feces for eggs of specific parasites).
- g. There is no animal disease monitoring program in place with an open line of communication with public officials which will facilitate sheep health management
- h. There are no disease control and eradication programs for diseases dangerous for humans and animals for farm economy, thus all measures should be taken by farmers themselves at this pint of time.

This situation limits the ability and appropriate actions by farmers to keep healthy sheep and solid financial input. In a broader context, this his can have a considerable effect on sheep production and internal and external markets for the and trade in lambs and wool.

Recommendations:

Among the various contagious and infectious disease affecting livestock, Brucellosis Disease ranks top priority in the Kosovo situation. It is a highly infectious bacterial disease that affects all cloven-footed animals. It causes direct economic loses due to mortality, drop in milk production, abortions, reduced meat production; and indirect loses like loss of milk yield on a permanent basis loss of breeding capacity, loss due of reduced draft capacity and loss due to denial of participation in International Livestock Trade. Also, it exercises a major risk in human health. The objective concerning this specific disease should be:

- ➤ to control the incidence of Brucellosis Disease in Kosovo by gradually resorting to a combination of activities like mass vaccination, animal movement control, outbreak management, continuous seromonitoring, and education of farmers.
- > to undertake epidemiological studies and disease surveillance throughout Kosovo.
- > to create and strengthen disease diagnostic facilities in Kosovo.
- > to use eradication programs that has been proven successful in eradication of brucellosis.

Other recommendations for the improvement of the sheep stock in Kosovo are the following:

- Conducting farmer awareness/education programmes because this is one of the most critical, but sometimes neglected, aspects of preparedness for protection and prevention of diseases. It is also important for fostering a sense of participation in and support for disease control/eradication campaigns among livestock farmers and other key stakeholders.
- 2. Making sheep farmers aware of the nature and potential consequences of important livestock diseases and of the benefits to be derived from their prevention and eradication. Furthermore, they should always have an element of rallying the community to the common cause of fighting a disease epidemic.
- 3. Building up linkage between KVFA and sheep farmers association or individual farmers in forming basic communication taking into consideration the diseases of greatest concern, their mode of transmission, methods to diagnose the disease, and treatment options for those animals diagnosed as having a disease of concern.
- 4. Arranging regular visits to farming communities for farmer interviews about diseases, provision of animal health advice, clinical examination of livestock and, when appropriate, postmortem examinations and collection of diagnostic specimens including serum samples. Emphasis should be given to critical areas identified by disease risk analyses and other epidemiological assessments;
- 5. Scheduling regular examinations of herds for diseases such as external parasites, foot rot, sore mouth, respiratory disease, ringworm, diarrhea, external abscesses, mange, and the meningeal worm, also rams for the presence of epididymitis. If any of these diseases exist in the farm, design should be made for a control program and implement the program as soon as possible in close cooperation with the KVFA.
- 6. Organizating vaccination program for herd against the clostridial diseases, sore mouth, foot rot, brucellosis, campylobacteriosis, chlamydiosis, and caseous lymphadenitis in close cooperation and supervision of the veterinarians.
- 7. Deworming on a regular schedule and running fecal exams semi-annually to ensure adequacy of the parasite control program through KVFA assistance.
- 8. Organizing and keeping herd's health records by farmers and determine if any animals have been affected with signs of chronic weight loss, neurological disorders, abortions, diarrhea, hard udder or arthritis. If any of these conditions have been seen within herd, screening of the herd for diseases such as Johne's disease, scrapie, chlamydiosis, campylobacteriosis, toxoplasmosis, brucellosis, and mycoplasmosis should be performed by Kosovo Veterinary Laboratories.
- 9. Conducting periodic targeted serological surveys in animal populations should be performed. These may be used either to detect the spread of infection or to prove freedom from infection. Serological surveys should be carefully designed to yield statistically valid information on the disease status of animal populations.
- 10. Purchasing livestock only from farms with strict biosecurity practices and a good history of disease control. The farm's medical records should be checked and question sellers about the history of abortion, neurological disease, chronic wasting, mastitis, and diarrhea on their farms. If any of these diseases have been seen on their farm, purchase of animals from this farm should be done only after extensive diagnostic testing has been performed. If a farm is found to be infected with a disease of concern, no animals, including those that test negative for a disease of concern, should be

purchased from that farm.

- 11. Conducting disease surveillance particularly in situations where animals and people are on the move. Epidemic livestock diseases are frequently spread by the movement of infected animals. This includes livestock markets, livestock trading routes, border areas and situations such as nomadism, transhumance and refugee movements from wars and civil strife.
- 12. Quarantining purchased livestock for one month. During this time, the animals should be dewormed, have their feet trimmed, and monitored for the presence of disease. A thorough physical exam should be performed on all animals at the end of the quarantine period to ensure that animals are free of clinical disease before being introduced to the remainder of the flock.
- 13. Establishing reliable identification systems for sheep for enhancement of disease-tracing capabilities;
- 14. Holding trainings for farmers specifically designed for certain disease (e.g. Footrot)

It should be noted that the MAFRD may, for purposes of control or prevention of an infectious or contagious disease, pay the costs of testing, treatment, vaccination or immunization of animals in such part or parts of Kosovo and for such time or times as it may deem advisable.

Note!

On the CD submitted with this report, there is an Albanian version of the training materials presented to farmers at the workshops.